

LPDES PERMIT NO. LA0056651, AI No. 328

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. **Company/Facility Name:** International Paper Company
Mansfield Mill
1202 Highway 509
Mansfield, Louisiana 71052
- II. **Issuing Office:** Louisiana Department of Environmental Quality
(LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
- III. **Prepared By:** Sonja Loyd
Water Permits Division
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Date Prepared: March 26, 2008

IV. **Permit Action/Status:**

A. Reason For Permit Action:

Proposed reissuance of an expired Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

- * In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX.Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301.F, 4901, and 4903.

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- B. LPDES permit: Effective date - February 1, 2003
 Minor Modification date - October 1, 2003
 Expiration date - January 31, 2008
- C. Date Application Received: The permit renewal application was received on July 26, 2007. Supplemental information needed to complete the permitting process was received on April 14, 2008 and April 17, 2008.

V. Facility Information:

- A. Location - 1202 Highway 509 in Mansfield, DeSoto Parish
(Latitude 32°09'26", Longitude 93°33'34")

- B. Applicant Activity -

According to the application, International Paper Company, Mansfield Mill, is an existing kraft pulp and paper mill. The Mansfield Mill's production activities are comprised of pulp and linerboard production. The Mansfield Mill's primary operations include multiple fuel-fired boilers (power operations), wood pulping, chemical recovery, causticizing and lime recovery, recycle area (de-inking operations), and papermaking. The Mansfield Mill also operates maintenance, storage, and shipping facilities in support of the operations at the facility.

- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Pulp, Paper, and Paperboard
Point Source Category

Reference

40 CFR 430
Subparts C, I, and J

Other sources of technology-based limits:

Current LPDES permit (effective February 1, 2003)
LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (USEPA)
LDEQ Sanitary Discharge General Permits
Best Professional Judgement

- D. Fee Rate -
1. Fee Rating Facility Type: Major
 2. Complexity Type: III
 3. Wastewater Type: II
 4. SIC codes: 2631 and 2611

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E. Continuous Facility Effluent Flow - 15.9 MGD, Maximum 30-Day

VI. **Receiving Waters:** Red River (Outfall 001); Bayou Pierre, thence to the Red River (Outfalls 002 and 003); Crook All Bayou, thence to the Red River (Outfall 005); and Red Lake Bayou, thence to the Red River (Outfall 006)

1. TSS (15%), mg/L: 24
2. Average Hardness, mg/L CaCO₃: 189.8
3. Critical Flow, cfs: 1,330
4. Mixing Zone Fraction: 0.333
5. Harmonic Mean Flow, cfs: 7,735
6. River Basin: Red River, Subsegment Nos. 100101, 100601, and 100605
7. Designated Uses:

Subsegment No. 100101 (Red River)

The designated uses are primary contact recreation, secondary contact recreation, fish and wildlife propagation, drinking water supply, and agriculture.

Subsegment Nos. 100601 (Bayou Pierre) and 100605 (Crook All Bayou and Red Lake Bayou)

The designated uses are primary contact recreation, secondary contact recreation, fish and wildlife propagation, and agriculture.

Information based on the following: LAC 33:IX Chapter 11 and Memorandum from Todd Franklin to Sonja Loyd dated March 7, 2008.

VII. **Outfall Information:**

Outfall 001

- A. Type of wastewater - Treated combined process wastewater, process area stormwater runoff, landfill leachate, utility wastewaters (comprised of cooling tower blowdown, boiler blowdown, scrubber water, filter backwash, boiler feed water, non-contact cooling water, and once-through cooling water), non-process area stormwater, and previously monitored treated sanitary wastewater (Internal Outfalls 101 and 201)
- B. Location - At the point of discharge from the final treatment unit (retention pond) prior to combining with other waters (Latitude 32°08'46", Longitude 93°32'14")
- C. Treatment - Primary clarification, settling pond, overland flow irrigation system, and constructed wetlands

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- D. Flow - Continuous, 15.9 MGD, Maximum 30-Day
- E. Receiving waters - Red River
- F. Basin and subsegment - Red River Basin, Subsegment No. 100101

Internal Outfall 101

- A. Type of wastewater - Treated sanitary wastewater
- B. Location - At the point of discharge from the chlorination unit at the end of sanitary wastewater treatment, located adjacent to the #1 and #2 wastewater clarifiers, prior to combining with the effluent at Outfall 001 (Latitude 32°09'23", Longitude 93°33'16")
- C. Treatment - Sewage Package Treatment Plant and Chlorination
- D. Flow - Continuous, 0.074 MGD, Maximum 30-Day
- E. Receiving waters - Red River via Outfall 001
- F. Basin and subsegment - Red River Basin, Subsegment No. 100101

Internal Outfall 201

- A. Type of wastewater - Treated sanitary wastewater
- B. Location - Adjacent to the #3 wastewater clarifier, at the point of discharge from the chlorination unit at the end of sanitary wastewater treatment in the No. 3 Paper Machine and Recycle Plant addition prior to combining with the effluent at Outfall 001 (Latitude 32°09'40", Longitude 93°33'37")
- C. Treatment - Sewage Package Treatment Plant and Chlorination
- D. Flow - Continuous, 0.014 MGD, Maximum 30-Day
- E. Receiving waters - Red River via Outfall 001
- F. Basin and subsegment - Red River Basin, Subsegment No. 100101

Outfall 002

- A. Type of wastewater - Overflow of treated combined process wastewater, process area stormwater runoff, landfill leachate, utility wastewaters (comprised of cooling tower blowdown, boiler blowdown, scrubber water, filter backwash, boiler feed water, non-contact cooling water, and once-through cooling water), non-process

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area stormwater, and previously monitored treated sanitary wastewater (Internal Outfalls 101 and 201)

[NOTE: This outfall has been established as an overflow discharge point from the effluent collection and treatment system which treats effluent discharging through Outfall 001. A discharge event occurs only when the influent to the discharge system exceeds pipeline capacity as a result of a significant rain event.]

- B. Location - At the point of discharge from the weir of the final treatment unit located near the southwest corner of the land application field prior to combining with other waters (Latitude 32°08'49", Longitude 93°32'32")
- C. Treatment - Primary clarification, settling pond, overland flow irrigation system, and constructed wetlands
- D. Flow - Intermittent, 8 MGD, Long Term Average
- E. Receiving waters - Red River via Bayou Pierre
- F. Basin and Subsegment - Red River Basin, Subsegment No. 100601

Outfall 003

- A. Type of wastewater - Uncontaminated stormwater runoff from process and non-process areas, treated fresh water reservoir overflow, steam condensate, incidental treated water from mill water supply pumping operations, and wash water from the employee car wash

[NOTE: Wastewater collected upstream of this outfall is recycled for use within the mill, when possible. No soaps and/or detergents are used in the wash water discharges.]

- B. Location - At the point of discharge into the ditch running south to the Bayou Pierre Drainage System prior to combining with the effluent at Outfall 002 (Latitude 32°08'49", Longitude 93°33'05")
- C. Treatment - None
- D. Flow - Intermittent, 41.4 MGD, Maximum 30-Day
- E. Receiving waters - Red River via Bayou Pierre
- F. Basin and Subsegment - Red River Basin, Subsegment No. 100601

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Outfall 005

- A. Type of wastewater - Low contamination potential stormwater runoff from the northern section of the new 110-acre solid waste disposal facility
- B. Location - At the point of discharge from the northwest portion of the new 110-acre solid waste disposal facility prior to combining with other waters (Latitude 32°10'37", Longitude 93°33'30")
- C. Treatment - None
- D. Flow - Intermittent, 31.4 MGD, Maximum 30-Day
- E. Receiving waters - Red River via Crook All Bayou
- F. Basin and Subsegment - Red River Basin, Subsegment No. 100605

Outfall 006

- A. Type of wastewater - Low contamination potential stormwater runoff from the southern section of the new 110-acre solid waste disposal facility and from the mill haul road
- B. Location - At the point of discharge from the southwest portion of the new 110-acre solid waste disposal facility prior to combining with other waters (Latitude 32°09'53", Longitude 93°33'42")
- C. Treatment - None
- D. Flow - Intermittent, 2.7 MGD, Maximum 30-Day
- E. Receiving waters - Red River via Red Lake Bayou
- F. Basin and Subsegment - Red River Basin, Subsegment No. 100605

VIII. Proposed Permit Limits:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

Summary of Proposed Changes From the Current LPDES Permit:

A. Outfall 001

The outfall description will be changed to read as follows: "Treated combined process wastewater, process area stormwater runoff,

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landfill leachate, utility wastewaters (comprised of cooling tower blowdown, boiler blowdown, scrubber water, filter backwash, boiler feed water, non-contact cooling water, and once-through cooling water), non-process area stormwater, and previously monitored treated sanitary wastewater (Internal Outfalls 101 and 201)".

The daily maximum and monthly average technology-based mass limits for BOD₅ and TSS will be changed based on the current production rate (Phase I) and a production rate increase (Phase II) as a result of the No. 2 Paper Machine upgrade.

A daily maximum and monthly average reporting requirement for Color will be added in the draft permit to gather data for TMDL purposes. The monitoring frequency will be once per quarter using a 24-hr. Composite sample.

The Whole Effluent Toxicity (WET) testing dilution series for Freshwater Chronic biomonitoring will be changed to reflect 2%, 3%, 4%, 5%, and 7% (with 5% defined as the biomonitoring critical dilution). The monitoring frequency shall be once per quarter using a 24-Hour Composite sample. This revision is based on a recommendation from the Technical Support Section in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. The proposed biomonitoring requirements were developed in accordance with U.S. Environmental Protection Agency, Region 6 (USEPA) policy and biomonitoring protocol which is being established in all major permits as a part of the permit reissuance process. See Appendix C for the Biomonitoring Recommendation.

Updated Part II conditions for the Freshwater Chronic Biomonitoring requirements will be established in the draft permit.

A provision requiring additional proper operation and maintenance procedures related to the effluent collection and discharge station will be re-established in the draft permit. This provision was established in the 1995 NPDES permit; however, it was inadvertently not included in the current permit.

The provision in Part II, Paragraph K regarding the summation of BOD₅ and TSS at Outfalls 001 and 002 will be removed from the draft permit. A footnote will be placed in Part I of the draft permit referencing this requirement.

B. Internal Outfall 101

The permittee's request for a monitoring frequency reduction for all parameters from once per month to once per quarter has been granted

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in accordance with the Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies (April 1996) based on information provided in the 2007 Application.

C. Outfall 002

The outfall description will be changed to read as follows: "Treated combined process wastewater, process area stormwater runoff, landfill leachate, utility wastewaters (comprised of cooling tower blowdown, boiler blowdown, scrubber water, filter backwash, boiler feed water, non-contact cooling water, and once-through cooling water), non-process area stormwater, and previously monitored treated sanitary wastewater (Internal Outfalls 101 and 201)".

The continuous pH monitoring language in Part I of the current permit will be removed in the draft permit. Due to the intermittent nature of this discharge, the pH monitoring requirement was changed in the current permit from a continuous measurement to a grab sample for each day a discharge occurs. Therefore, language pertaining to continuous pH monitoring at this outfall will be removed from the draft permit and replaced with the standard limits for pH of 6.0 S.U. (minimum) and 9.0 S.U. (maximum).

The daily maximum and monthly average technology-based mass limits for BOD₅ and TSS will be changed based on the current production rate (Phase I) and a production rate increase (Phase II) as a result of the No. 2 Paper Machine upgrade.

The permittee has requested that a daily maximum and monthly average reporting requirement for BOD₅ be established at this outfall in lieu of the BOD₅ concentration limits of 30 mg/l and 25 mg/L, respectively. These limits were retained in the current permit due to the intermittent nature of the discharges from this outfall. Therefore, based on the permittee's compliance history at this outfall for the past five years and the requirement to comply with technology-based mass limits which apply to the sum of the discharges from Outfalls 001 and 002, a requirement to report the concentration sample measurements will be added to replace the concentration limits established for this parameter in the draft permit.

The provision in Part II, Paragraph K (BOD₅ and TSS Limits at Outfall 001) of the current permit will be removed from the draft permit. A footnote will be placed in Part I of the draft permit referencing this requirement.

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D. Outfall 003

The outfall description will be changed to read as follows:
"Uncontaminated stormwater runoff from process and non-process areas, treated fresh water reservoir overflow, steam condensate, incidental treated water from mill water supply pumping operations, and wash water from the employee car wash".

E. Outfalls 003, 005, and 006

The permittee has requested that the daily maximum limit for BOD₅ be removed from the draft permit. This limit was retained in the current permit based on the 1995 NPDES permit. However, since these outfalls primarily discharge low contamination potential stormwater runoff, it has been determined that the limits and monitoring requirements for TOC, Oil and Grease, and pH at these outfalls are sufficient for monitoring these discharges and are consistent with the LDEQ Stormwater Guidance for stormwater discharges associated with industrial activities. Therefore, the limit and monitoring requirement for BOD₅ will be removed from the draft permit.

For Outfalls 005 and 006, the subsegment number has been renumbered to reflect 100605 instead of 100601. This renumbering is based on updates made to the Arc View Mapping System by the Geographical Information System (GIS) Center.

F. Outfall 004

The permittee requested that this outfall be removed from the draft permit. This outfall was established when the raw intake water was being chlorinated at the intake structure prior to being pumped to the mill; however, the raw intake water is no longer being chlorinated. Therefore, this outfall will be removed from the draft permit.

G. The facility discharges to a Water Quality Act 303(d) stream. Therefore, a reopener clause will be added to Part II of the draft permit in the event that the permit requires reassessment regarding 303(d) status resulting in incorporation of the results of any future Total Maximum Daily Load (TMDL) allocation for the receiving waterbodies.

H. Updated Part II conditions for stormwater discharges associated with industrial activities have been established in the draft permit.

I. The provision in the Part II conditions that required submittal of DMRs to the Northwest Regional Office has been removed from the draft permit. All DMRs sent to the Office of Environmental

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Compliance/Permit Compliance Unit are scanned into the Electronic Document Management System which is accessible to all LDEQ personnel.

IX. Current Effluent Limits:

See Appendix D - LPDES permit limits

X. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for the types of wastewaters. See outfall information descriptions for associated outfall(s) in Section VII.

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.I./40 CFR 122.44(I)]. All monitoring frequencies are based upon BPJ and/or consistent with frequencies established in the current permit. The whole Effluent Toxicity testing frequency is based upon recommendations from the Technical Support Section (See Appendix C).

The proposed effluent limits, monitoring requirements, sample types, and basis of permit limits in the draft permit are as follows:

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1. Outfall 001 - Treated combined process wastewater, process area stormwater runoff, landfill leachate, utility wastewaters (comprised of cooling tower blowdown, boiler blowdown, scrubber water, filter backwash, boiler feed water, non-contact cooling water, and once-through cooling water), non-process area stormwater, and previously monitored treated sanitary wastewater (Internal Outfalls 101 and 201)

The permittee is subject to the New Source Performance Standards (NSPS) effluent limitation guidelines listed below:

<u>Manufacturing Operation</u>	<u>Guideline</u>
Pulp, Paper, and Paperboard	40 CFR 430, Subparts C, I, and J

Subpart C (NSPS 430.35) - Unbleached kraft facilities where pulp and paper are produced using the unbleached kraft-neutral sulfite semi-chemical (cross recovery) process and/or a combined unbleached kraft and semi-chemical process, wherein the spent semi-chemical cooking liquor is burned within the unbleached kraft chemical recovery system.

Subpart I (NSPS 430.95) - Facilities where fine paper is produced.

Subpart J (NSPS 430.105) - Secondary fiber non-deink facilities where paperboard from wastepaper is produced (noncorrugating medium furnish subdivision).

Calculations and basis of the technology-based mass limits for BOD₅ and TSS are found in Appendices A-1 and A-2. See below for site-specific considerations.

Phase I - Before No. 2 Paper Machine Upgrade

Parameter	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Reference
	unless otherwise stated (mg/L)				
Flow (MGD)	Report	Report	Continuous	Recorder	Current permit
pH Range Excursions No. of Events >60 minutes	---	0 (*1)	Continuous	Recorder	Current permit

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Parameter	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Reference
	unless otherwise stated (mg/L)				
pH Range Excursions Monthly Total Accumulated Time in Minutes	---	446 (*1)	Continuous	Recorder	Current permit
pH (Standard Units)	Report (*1) (Min)	Report (*1) (Max)	Continuous	Recorder	Current permit
BOD ₅ (*2)	19,329	35,837	1/week	24-hr. Composite	Current permit; 40 CFR 430
TSS (*2)	32,899	63,114	1/week	24-hr. Composite	Current permit; 40 CFR 430
Color (PCU) (*3)	Report	Report	1/quarter	24-hr. Composite	BPJ; CWA 303(d) List
Biomonitoring	See Section D	See Section D	1/quarter	24-hour Composite	See Section D

(*1) The pH shall be within a range of 6.0 - 9.0 Standard Units at all times subject to the continuous monitoring pH range excursion provision in Part II, Paragraph I of the draft permit.

(*2) The permittee shall sum the daily maximum and monthly average discharges for BOD₅ and TSS from Outfalls 001 and 002 for the purpose of compliance at Outfall 001.

(*3) Report Color in platinum-cobalt units.

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Phase II - After No. 2 Paper Machine Upgrade

Parameter	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Reference
	unless otherwise stated (mg/L)				
Flow (MGD)	Report	Report	Continuous	Recorder	Current permit
pH Range Excursions No. of Events >60 minutes	---	0 (*1)	Continuous	Recorder	Current permit
pH Range Excursions Monthly Total Accumulated Time in Minutes	---	446 (*1)	Continuous	Recorder	Current permit
pH (Standard Units)	Report (*1) (Min)	Report (*1) (Max)	Continuous	Recorder	Current permit
BOD ₅ (*2)	19,825	36,758	1/week	24-hr. Composite	Current permit; 40 CFR 430
TSS (*2)	33,796	64,838	1/week	24-hr. Composite	Current permit; 40 CFR 430
Color (PCU) (*3)	Report	Report	1/quarter	24-hr. Composite	BPJ; CWA 303(d) List
Biomonitoring	See Section D	See Section D	1/quarter	24-hour Composite	See Section D

(*1) The pH shall be within a range of 6.0 - 9.0 Standard Units at all times subject to the continuous monitoring pH range excursion provision in Part II, Paragraph I of the draft permit.

(*2) The permittee shall sum the daily maximum and monthly average discharges for BOD₅ and TSS from Outfalls 001 and 002 for the purpose of compliance at Outfall 001.

(*3) Report Color in platinum-cobalt units.

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Site-Specific Consideration

The permittee is subject to the New Source Performance Standards (NSPS) for the control of Pentachlorophenol or Trichlorophenol. However, the permittee certified that chlorophenolic-containing biocides are not used at the facility. Therefore, limits and monitoring requirements for Pentachlorophenol and Trichlorophenol will not be incorporated in this draft permit in accordance with 40 CFR 430, Subparts C, I, and J. Any anticipated use of these biocides will require notification as specified in 40 CFR 122.41(l)/LAC 33:IX.2701.L.

2. Internal Outfall 101 and 201 - Treated sanitary wastewater

Sanitary wastewater shall receive limits and monitoring requirements consistent with the current permit. These internal wastewaters are regulated in accordance with LAC 33:IX.709.B or 711, by BPJ using the LDEQ Sanitary Discharge General Permits and the Louisiana Water Quality Management Plan, Volume 8, Appendix B (Statewide Sanitary Effluent Limits Policy), as applicable. According to the Statewide Sanitary Effluent Limitations Policy, dischargers to the Red River shall receive limits equivalent to secondary treatment.

Parameter	Monthly Average	Weekly Average	Measurement Frequency	Sample Type	Reference
	unless otherwise stated (mg/L)				
Flow (MGD)	Report	Report	1/quarter	Estimate	Current permit
Fecal Coliform (Colonies/ 100 ml)	200	400	1/quarter	Grab	Current permit

Site-Specific Consideration

The permittee's request for a monitoring frequency reduction at Internal Outfall 101 for all parameters from once per month to once per quarter has been granted in accordance with the Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies (April 1996) based on information provided in the 2007 Application.

3. Outfall 002 - Overflow of treated combined process wastewater, process area stormwater runoff, landfill leachate, utility wastewaters (comprised of cooling tower blowdown, boiler blowdown, scrubber water, filter backwash, boiler feed water, non-contact cooling water, and once-

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through cooling water), non-process area stormwater, and previously monitored treated sanitary wastewater (Internal Outfalls 101 and 201)

The permittee is subject to the New Source Performance Standards (NSPS) effluent limitation guidelines listed below:

<u>Manufacturing Operation</u>	<u>Guideline</u>
Pulp, Paper, and Paperboard	40 CFR 430, Subparts C, I, and J

Subpart C (NSPS 430.35) - Unbleached kraft facilities where pulp and paper are produced using the unbleached kraft-neutral sulfite semi-chemical (cross recovery) process and/or a combined unbleached kraft and semi-chemical process, wherein the spent semi-chemical cooking liquor is burned within the unbleached kraft chemical recovery system.

Subpart I (NSPS 430.95) - Facilities where fine paper is produced.

Subpart J (NSPS 430.105) - Secondary fiber non-deink facilities where paperboard from wastepaper is produced (noncorrugating medium furnish subdivision).

Calculations and basis of the technology-based mass limits for BOD₅ and TSS are found in Appendices A-1 and A-2. See below for site-specific considerations.

Parameter	Monthly Average	Daily Maximum	Measurement Frequency (*1)	Sample Type	Reference
	unless otherwise stated (mg/L)				
Flow (MGD)	Report	Report	Continuous	Recorder	Current Permit
BOD ₅	(*2)	(*2)	1/day	Grab	Current permit; 40 CFR 430
TSS	(*2)	(*2)	1/day	Grab	Current permit; 40 CFR 430
Color (PCU) (*3)	Report)	Report	1/day	Grab	Current permit
pH (Standard Units)	6.0 (Min)	9.0 (Max)	1/day	Grab	Current permit

(*1) When discharging.

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(*2) The mass limits for BOD₅ and TSS shall be representative of the arithmetic sum of the discharges from Outfalls 001 and 002. The sample value shall be reported on the DMR for Outfall 001 for the purpose of compliance.

(*3) Report Color in platinum-cobalt units.

4. Outfall 003 - Uncontaminated stormwater runoff from process and non-process areas, treated fresh water reservoir overflow, steam condensate, incidental treated water from mill water supply pumping operations, and wash water from the employee car wash

Uncontaminated or low potential contaminated stormwater, including wash water (without soaps and/or detergents), discharged through outfalls not associated with process wastewater shall receive the following limits and monitoring requirements by BPJ in accordance with the current permit and LDEQ Stormwater Guidance.

Parameter	Monthly Average	Daily Maximum	Measurement Frequency (*1)	Sample Type	Reference
	unless otherwise stated (mg/L)				
Flow (MGD)	Report	Report	1/quarter	Estimate	Current permit
TOC	---	50	1/quarter	Grab	Current permit
Oil and Grease	---	15	1/quarter	Grab	Current permit
pH	6.0 S.U. (Min.)	9.0 S.U. (Max.)	1/quarter	Grab	Current permit

(*1) When discharging.

5. Outfall 005 - Low contamination potential stormwater runoff from the northern section of the new 110-acre solid waste disposal facility

Uncontaminated or low potential contaminated stormwater discharged through outfalls not associated with process wastewater shall receive the following limits and monitoring requirements by BPJ in accordance with the current permit and LDEQ Stormwater Guidance.

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Parameter	Monthly Average	Daily Maximum	Measurement Frequency (*1)	Sample Type	Reference
	unless otherwise stated (mg/L)				
Flow (MGD)	Report	Report	1/quarter	Estimate	Current permit
TOC	---	50	1/quarter	Grab	Current permit
Oil and Grease	---	15	1/quarter	Grab	Current permit
pH	6.0 S.U. (Min.)	9.0 S.U. (Max.)	1/quarter	Grab	Current permit

(*1) When discharging.

6. Outfall 006 - Low contamination potential stormwater runoff from the southern section of the new 110-acre solid waste disposal facility and from the mill haul road

Uncontaminated or low potential contaminated stormwater discharged through outfalls not associated with process wastewater shall receive the following limits and monitoring requirements by BPJ in accordance with the current permit and LDEQ Stormwater Guidance.

Parameter	Monthly Average	Daily Maximum	Measurement Frequency (*1)	Sample Type	Reference
	unless otherwise stated (mg/L)				
Flow (MGD)	Report	Report	1/quarter	Estimate	Current permit
TOC	---	50	1/quarter	Grab	Current permit
Oil and Grease	---	15	1/quarter	Grab	Current permit
pH	6.0 S.U. (Min.)	9.0 S.U. (Max.)	1/quarter	Grab	Current permit

(*1) When discharging.

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Storm Water Pollution Prevention Plan Requirements

In accordance with LAC 33:IX.2707.I and [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP. is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS

Sample measurements from the permittee's 2007 Application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. Calculations, results, and documentation are given in Appendices B-1 and B-2.

In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard."

The following pollutants received water quality based effluent limits:

None

TMDL Waterbodies

Outfall 001

Subsegment No. 100101 of the Red River Basin is listed on the 2006 Final Integrated 303(d) List as being impaired with sulfates and color. To date, no Total Maximum Daily Loading (TMDL) assessments have been completed for this subsegment. The TMDL assessments are scheduled to be completed by 2007-2008. Based on the reasonable potential analysis, it

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was determined that the permittee does not have the potential to discharge sulfates at a level which would adversely affect the receiving waterbody. However, based on information provided in the application, it was determined that the permittee does have the potential to discharge constituents that would contribute to the impairment for color. In the 1980 NPDES permit, the permittee was required to comply with limits and a monitoring requirement for this parameter based on the New Source Performance Standards promulgated in 1974. However, in 1976 USEPA concluded (with concurrence from the State) that the discharge of color from this facility did not pose a significant environmental concern. In light of the above information, a determination was made to remove the limits and monitoring requirement for color since the USEPA withdrew the existing effluent limits and standards for color from the guidelines. USEPA further suggested that limits for color would be considered on a case-by-case basis (after considerations of water quality impacts). Therefore, a daily maximum reporting requirement for this aesthetic pollutant will be added to the draft permit for data gathering purposes.

Outfalls 002 and 003

Subsegment No. 100601 of the Red River Basin is listed on the 2006 Final Integrated 303(d) List as being impaired with organic enrichment/low Dissolved Oxygen (DO) (EPA - Category 5) and nutrients (EPA - Category 5). To date, no Total Maximum Daily Loading (TMDL) assessments have been completed for this subsegment. The TMDLs are scheduled to be completed by 2007-2008. Based on an evaluation of these discharges, it was determined that the permittee does have the potential to discharge constituents that could contribute to these impairments. Therefore, limits and monitoring requirements for BOD₅ and/or TOC have been established in the draft permit. In regard to nutrients, LDEQ has determined that organic enrichment/DO directly correlates with overall nutrient impact. Thus, when organic enrichment/DO is limited, the LDEQ is in effect also limiting and controlling nutrient concentrations and impacts.

Outfalls 005 and 006

Subsegment No. 100605 of the Red River is not listed on the 2006 Final Integrated 303(d) List as being impaired.

A reopener clause will be placed in Part II of the draft permit to allow for more stringent or additional limits or requirements as imposed by any future TMDLs.

D. Biomonitoring Requirements

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative

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criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols. See Appendix C for the Biomonitoring Recommendation.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall 001 are as follows:

TOXICITY TESTS

FREQUENCY

Chronic static renewal 7-day
survival and reproduction test
using Ceriodaphnia dubia
[Method 1002.0]

1/quarter

Chronic static renewal 7-day
larval survival and growth test
using fathead minnow (Pimephales
promelas) [Method 1000.0]

1/quarter

The draft permit additionally requires the reporting of the coefficient of variation (larger of the low-flow and control dilutions) for each test species.

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001, March 1989." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to the Office of Environmental Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit.

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The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 2%, 3%, 4%, 5%, and 7%. The low-flow effluent concentration (biomonitoring critical dilution) is defined as 5% effluent.

XI. Compliance History/DMR Review:

- A. LDEQ records were reviewed for the period March 2006 through March 2008. No water enforcement actions were issued during this time period.
- B. A DMR review of the monitoring reports for the period of January 2006 through February 2008 revealed that there were no effluent violations.
- C. The most recent inspection was performed on June 27, 2007. All areas evaluated were found to be satisfactory.

XII. Endangered Species:

The receiving waterbodies, Subsegment Nos. 100101, 100601, and 100605 of the Red River Basin are not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

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XIII. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XIV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XV. Variances:

No requests for variances have been received by this Office.

XVI. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper(s) of general circulation

Office of Environmental Services Public Notice Mailing List